

DEVAL L. PATRICK GOVERNOR TIMOTHY P. MURRAY LIEUTENANT GOVERNOR JUDYANN BIGBY, MD SECRETARY JOHN AUERBACH

COMMISSIONER

# The Commonwealth of Massachusetts

Executive Office of Health and Human Services
Department of Public Health
William A. Hinton State Laboratory Institute
305 South Street, Jamaica Plain, MA 02130

08/26/2011

David McGowan Assistant District Attorney, Suffolk County

Dear ADA McGowan,

Enclosed is the information you requested in regards to Commonwealth vs. Included are copies of the following:

- 1. Curriculum Vitae for Annie Dookhan and Daniel Renczkowski.
- 2. Drug Analysis Laboratory Receipt.
- 3. Control Cards with analytical results for samples #
- 4. Analysis sheets with custodial chemist's hand notations and test results.
- 5. GC/Mass Spectral analytical data for samples #

Annie Dookhan was the custodial chemist and performed the preliminary testing and net weight for this sample. Daniel Renczkowski was the confirmatory chemist and analyzed the GC/MS data for this sample.

If you have any questions about these materials, please call me at the number below.

(lan)

Ännie Dookhan

Chemist II

Sincerely

Drug Analysis Lab

Jamaica Plain, MA. 02130

(617) 983-6631

#### Curriculum Vitae

#### Annie Khan (Dookhan)

#### Education:

University of Massachusetts, Boston, Ma, Master of Science in Chemistry. University of Massachusetts, Boston, Ma, Bachelor of Science in Biochemistry.

### Experience:

2003 - present

Chemist I, II, Massachusetts Department of Public Health, Drug Analysis Laboratory

- \*Completed six-week training course conducted by senior staff within the Department of Public Health, Drug Analysis Laboratory.
- \*Appointed Assistant Analyst by Assistant Commissioner of Public Health, 2004.
- \*Responsible for the identification of illicit drugs to determine violations of harmful and narcotic drug laws.
- \*Trained in the use of complex analytical instrumentation, microscopes and balances for the purpose of drug analysis.
- \*Maintenance and repairs of all analytical instruments.
- \*Responsible for the Quality Control of all analytical instruments, reagents and controls/standards.
- \*Oversee the Quality Control/Quality Assurance program for the Drug Lab.
- \*Writing, revising and reviewing Standard Operating Procedures (SOPs) and Protocols.
- \*Notary Public.
- \*Qualified as an expert witness in Massachusetts Courts and U.S. District Court

2001 - 2003

QC Analyst I, II, UMMS-Massachusetts Biologic Laboratory, QC Material Control

- \*Completed proficiency training conducted by a member of the staff within the MLB Quality Control and Quality Assurance Department.
- \*Method Development for creating new techniques and enhancing vaccines for the QC Dept. and FDA.
- \*Writing, revising and reviewing Standard Operating Procedures (SOPs).
- \*Trained and supervised new chemists and interns for the department.
- \*Routine QC testing of products for the FDA.
- \*Trained in the use of complex analytical instrumentation, and balances for the purpose of QC analysis for product and validation projects.
- \*Calibration, preventive maintenance, QC and QA of analytical instrumentation.
- \*Complete testing of chemicals for Vendor Validation Project for the FDA.
- \*Compendial testing and interpretation of the USP, ACS, FCC, AOAC, Merck Index, PDR, etc.

## **Additional Training:**

Dept. of Justice – Forensics Professionals. (numerous trainings)

GLP/GMP training with Massachusetts Biologic Laboratory.

QC/QA training according to FDA Codes and Regulations.

GC and GC/MS trainings with Agilent Technologies and Restek.

HPLC and LC/MS/MS trainings with Waters Cooperation.

FTIR training with Spectros.

TOC training with MBL and Sievers.

## Association:

American Chemical Society (ACS)

Northeastern Association of Forensics Science (NEAFS)

# Curriculum Vitae

# Daniel Renczkowski

# Education

Degree:

Bachelors of Science in Forensic Chemistry,

May 2005 from Buffalo State College

GPA: 3.84, Dean's List, Honor's Recognition American Chemical Society Undergraduate Award

Phi Lambda Upsilon Membership

Related Coursework: Analytical Chemistry

Organic Chemistry I and II

Biochemistry

Chemistry of Criminalistics

Anatomy

Physical Chemistry

Instrumental Chemistry Forensics Laboratory

Physical Evidence

Physiology

# Employment

Massachusetts Department of Public Health Drug Analysis Laboratory Chemist I (October 2005 – March 2008)

Chemist II (March 2008 - present)

- -Successfully completed an eight week training course in the analysis of drugs conducted by senior staff
- -Successfully completed GC/MS training program
- -Responsible for the identification of substances to determine violation of the Controlled Substances Act of the Massachusetts General Laws
- -Responsible for maintenance and repairs of analytical instruments
- -Responsible for quality control of analytical instruments and standards

# Related Experience

Niagara County Forensics Laboratory

Forensic Internship, January 2005

- -Conducted research on the presumptive testing of saliva
- -Conducted research on the identification and detection of lubricants
- -Observed all aspects of the laboratory including drug analysis, firearms comparison, trace evidence, arson investigation, toxicology, and serology
- -Daily use of FTIR microscope and DuraSamplerII
- -Familiarized with GC/MS programs



POSICIPE DE PARTMENT  PRUG RECEIPT  istrict/Unit	PAGE #/ DESTRUCTION #	PAGE #				
istrict/Unit	T. MURPHY	ID# 8	689			
DEFENDANT'S NAME	ADDRESS	CITY	STATE			
		Rox.	na			
		LABU	SE ONLY			
DESCRIPTION OF ITEMS SUBMITTED	GROSS QUANTITY	GROSS WEIGHT	ANALYSIS NUMBER			
2012 Powder	1 Lg. FOLD	01.59 gm				
	2	01.59 gm				
		<b>0</b>				
		*****				

ECU Control # \_\_\_\_

Date Analyzed: 8-20-10 No. City: Boston D.C.U. Police Dept. Officer: P.O. Diana Lopez Def: Amount: 2 Subst: SUB No. Cont: Cont: paper bag Date Rec'd: 08/10/2010 → No. Analyzed: Net Weight: \53.5 Gross Wt.: 201.59 #Tests: 8 ASO · UDIR

Findings:

Heroin

Prelim: Heroin

1

# DRUG POWDER ANALYSIS FORM

No. of samples tested:	AGENCY 8		
PHYSICAL DESCRIPTION: Beige poudered		Gross Wt(2_): <u>\</u>	Wanter of the second
PRELIMINARY TESTS		Milana and Allina Task	
Spot Tests  Cobalt Thiocyanate ( +)		Microcrystalline Tests  Gold Chloride	
Marquis + Froehde's + Mecke's +		OTHER TESTS	
PRELIMINARY TEST RESULTS  RESULTS HOOK  DATE 8-19-10		GC/MS CONFIRMATORY TEST  RESULTS HENOIS  MS	
		OPERATOR 052 DATE 8-20-10	

# samples tested; 2

#	Gross Welght	Packet Welght	Net Weight	#	Gross Weight	Packet Weight	Net Welght
1	95.6	19.1	76.5	26			
2_	96.7	19.7	17.0	27			
3				28			
4				29			
5				30			
6	,,,,,			31	on and the second se		
7				32	00000011001 <sup>-3</sup> No.		977778
8				33			
9			7.	34			
10				35			
11				36	· · · · · · · · · · · · · · · · · · ·		
12				37			pp.
13				38	······································	44.50	
14				39	000000000000000000000000000000000000000	•	08_1660000000000000000000000000000000000
15			WAS 1000000 - WAS 1000000	40			
16				41			angenerit
17				42			· · · · · · · · · · · · · · · · · · ·
18	No. of the last of			43			
19	,,			44			······································
20				45	.00100100000000000000000000000000000000		
21			, 1000, 1000, 1000, 1000, 1000, 1000, 1000, 1000, 1000, 1000, 1000, 1000, 1000, 1000, 1000, 1000, 1000, 1000,	46			······································
22	.,			47			· ;
23			40.00000000000000000000000000000000000	48	······································		
24				49			
25	lations:			50			

Calculations:

Netw+ = 133.5



File Name : C:\msdchem\1\data\SYSTEM6\08 19 10\738305.D

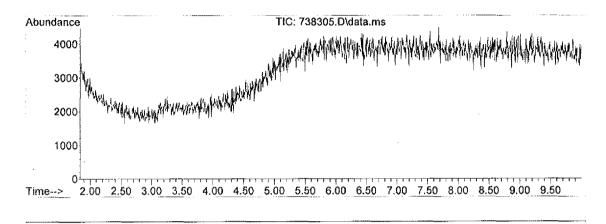
Operator : ASD

Date Acquired : 19 Aug 2010 10:49

Sample Name : BLANK

Submitted by

Vial Number : 1 AcquisitionMeth: DRUGS.M Integrator : RTE /DJR 4.25-11



Ret. Time

Area

Area %

Ratio %

\*\*\*NO INTEGRATED PEAKS\*\*\*

File Name : C:\msdchem\1\data\SYSTEM6\08\_19\_10\738306.D

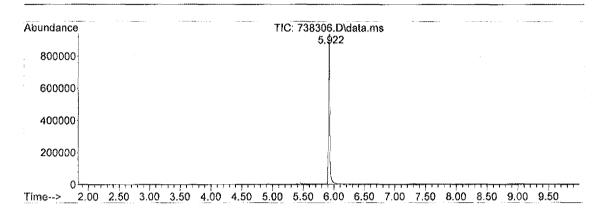
Operator : ASD

Date Acquired : 19 Aug 2010 11:02

Sample Name : HEROIN STD

Submitted by

Vial Number : 6
AcquisitionMeth: DRUGS.M
Integrator : RTE



Ret. Time	Area	Area %	Ratio %
5.922	1383740	100.00	100.00

File Name : C:\msdchem\1\data\SYSTEM6\08 19 10\738306.D

Operator : ASD

Date Acquired : 19 Aug 2010 11:02

Sample Name : HEROIN STD

Submitted by

Vial Number : 6 AcquisitionMeth: DRUGS.M Integrator : RTE

Search Libraries: C:\Database\SLI.L

C:\Database\SLI.L Minimum Quality: 80 C:\Database\NIST08.L Minimum Quality: 80

C:\Database\PMW TOX2.L

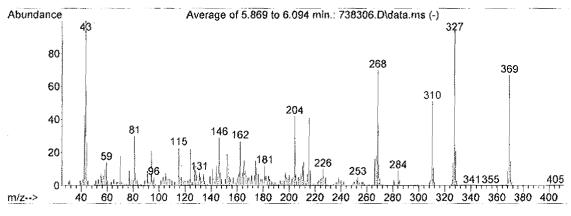
PK# RT Library/ID CAS# Qual

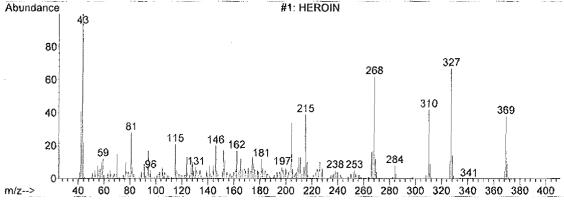
1 5.92 C:\Database\SLI.L

HEROIN

000561-27-3

99



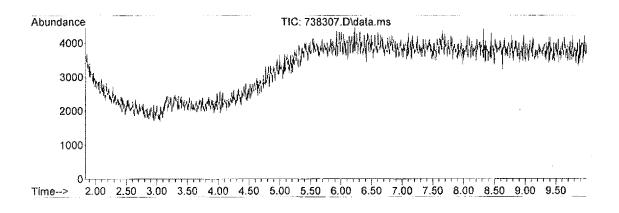


File Name : C:\msdchem\1\data\SYSTEM6\08\_19\_10\738307.D

Operator : ASD

Date Acquired : 19 Aug 2010 11:15

Sample Name : BLANK
Submitted by : ASD
Vial Number : 1
AcquisitionMeth: DRUGS.M
Integrator : RTE



Ret. Time

Area

Area %

Ratio %

\*\*\*NO INTEGRATED PEAKS\*\*\*

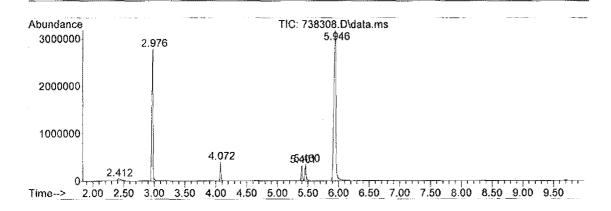
File Name : C:\msdchem\1\data\SYSTEM6\08 19 10\738308.D

Operator : ASD

Date Acquired : 19 Aug 2010 11:27

Sample Name

Submitted by : ASD
Vial Number : 8
AcquisitionMeth: DRUGS.M
Integrator : RTE



Ret. Time	Area	Area %	Ratio %	
2.412	203953	1.58	2.70	
2.976	3925741	30.36	52.05	
4.072	380148	2.94	5.04	
5.401	393426	3.04	5.22	
5.460	484033	3,74	6.42	
5.946	7541960	58.33	100.00	

File Name : C:\msdchem\1\data\SYSTEM6\08\_19\_10\738308.D

Operator : ASD

Date Acquired : 19 Aug 2010 11:27

Sample Name

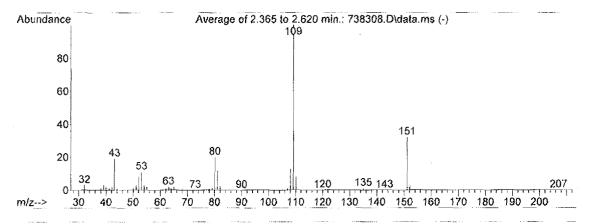
Submitted by : ASD Vial Number 8 AcquisitionMeth: DRUGS.M Integrator : RTE

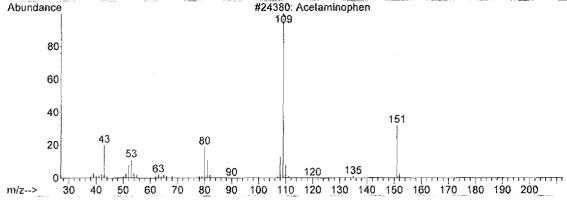
Search Libraries: C:\Database\SLI.L

Minimum Quality: 80 Minimum Quality: 80

C:\Database\NIST08.L

PK#	RT	Library/ID	CAS#	Qual
1.	2.41	C:\Database\NIST08.L Acetaminophen	000103-90-2	97
		Acetaminophen Acetaminophen Acetaminophen	000103-90-2 000103-90-2 000103-90-2	95 94





File Name : C:\msdchem\1\data\SYSTEM6\08 19 10\738308.D

Operator : ASD

Date Acquired 19 Aug 2010 11:27

Sample Name

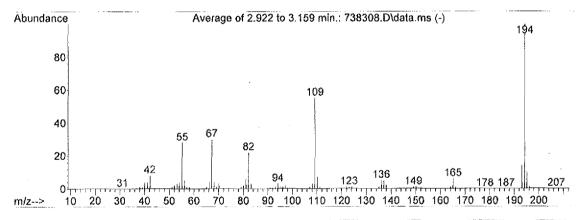
Submitted by : ASD Vial Number 8 AcquisitionMeth: DRUGS.M Integrator RTE

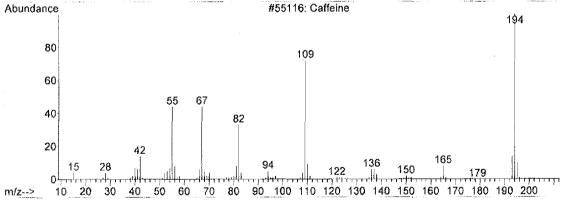
Search Libraries: C:\Database\SLI.L

Minimum Quality: 80 Minimum Quality: 80

C:\Database\NIST08.L

PK#	RT	Library/ID	CAS#	Qual
2	2.98	C:\Database\NIST08.L		
		Caffeine	000058-08-2	97
		Caffeine	000058-08-2	97
		Caffeine	000058-08-2	96





File Name : C:\msdchem\1\data\SYSTEM6\08 19 10\738308.D

Operator : ASD

Date Acquired 19 Aug 2010 11:27

Sample Name

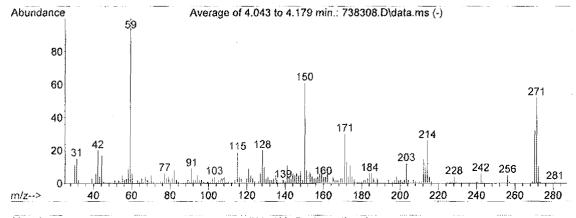
Submitted by ASD Vial Number 8 AcquisitionMeth: DRUGS.M : RTE Integrator

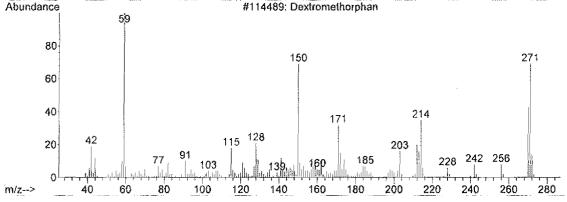
Search Libraries: C:\Database\SLI.L

Minimum Quality: 80 Minimum Quality: 80

C:\Database\NIST08.L

PK#	RT	Library/ID	CAS#	Qual
3	4.07	C:\Database\NIST08.L Dextromethorphan	. 000125-71-3	99
		Dextromethorphan	000125-71-3	98
		Dextromethorphan	000125-71-3	98





: C:\msdchem\1\data\SYSTEM6\08 19 10\738308.D File Name

Operator : ASD

19 Aug 2010 Date Acquired 11:27

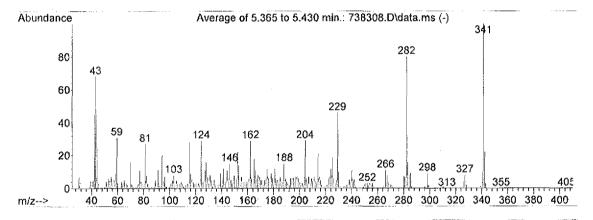
Sample Name

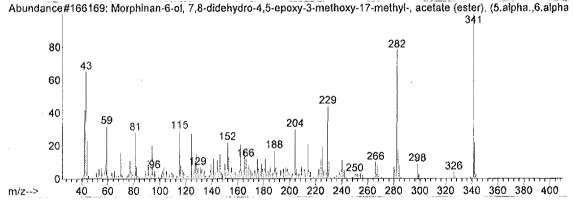
Submitted by ASD Vial Number 8 AcquisitionMeth: DRUGS.M Integrator RTE

Search Libraries: C:\Database\SLI.L

Minimum Quality: 80 C:\Database\NIST08.L Minimum Quality: 80

PK#	RT	Library/ID		CAS#	Qual
 4	5.40	C:\Database\NIST	08.L		
		Morphinan-6-ol,	7,8-didehydro-4,5-e	006703-27-1	99
		Morphinan-6-ol,	7,8-didehydro-4,5-e	006703-27-1	99
		Morphinan-6-01	7 9-didehudro-4 5-e	006703-27-1	9.9





File Name : C:\msdchem\1\data\SYSTEM6\08 19 10\738308.D

Operator : ASD

19 Aug 2010 Date Acquired 11:27

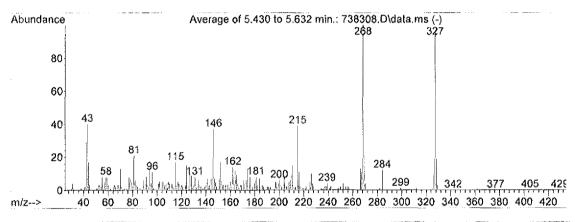
Sample Name

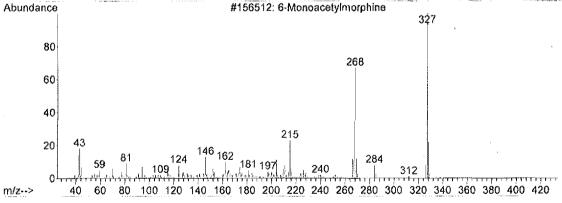
Submitted by ASD Vial Number 8 AcquisitionMeth: DRUGS.M Integrator : RTE

Search Libraries: C:\Database\SLI.L

Minimum Quality: 80 C:\Database\NIST08.L Minimum Quality: 80

PK#	RT	Library/ID	CAS#	Qual
5	5.46	C:\Database\NIST08.I, 6-Monoacetylmorphine 6-Monoacetylmorphine 6-Monoacetylmorphine	002784-73-8 002784-73-8 002784-73-8	95 94 93





File Name : C:\msdchem\1\data\SYSTEM6\08 19 10\738308.D

Operator : ASD

Date Acquired 19 Aug 2010 11:27

Sample Name

RT

PK#

Submitted by ASD Vial Number 8 AcquisitionMeth: DRUGS.M Integrator RTE

Search Libraries: C:\Database\SLI.L

Minimum Quality: 80 C:\Database\NIST08.L Minimum Quality: 80

C:\Database\PMW TOX2.L

Library/ID CAS#

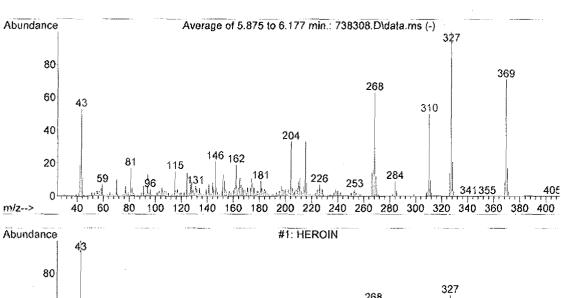
б 5.95

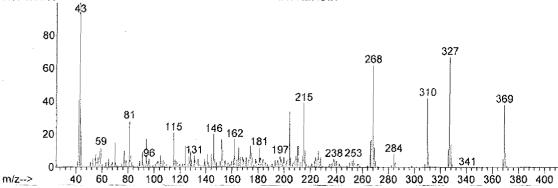
C:\Database\SLI.L HEROIN

000561-27-3

99

Qual





File Name : C:\msdchem\1\data\SYSTEM6\08\_19\_10\738309.D

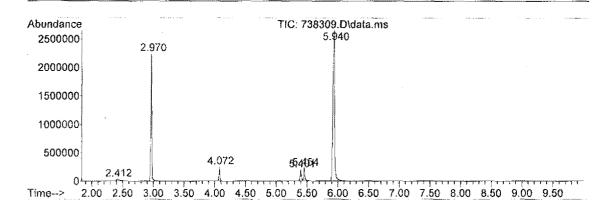
Operator : ASD

Date Acquired : 19 Aug 2010 11:40

Sample Name Submitted by

: ASD

Vial Number : 9
AcquisitionMeth: DRUGS.M
Integrator : RTE



Ret. Time	Area	Area %	Ratio %	
2.412	124665	1.40	2.35	
2.970	2695354	30.24	50.91	
4.072	243003	2.73	4,59	
5.401	253108	2.84	4.78	•
5,454	303453	3.40	5.73	
5.940	5293851	59.39	100.00	

File Name : C:\msdchem\1\data\SYSTEM6\08 19 10\738309.D

Operator : ASD

Date Acquired : 19 Aug 2010 11:40

Sample Name

Submitted by : ASD
Vial Number : 9
AcquisitionMeth: DRUGS.M
Integrator : RTE

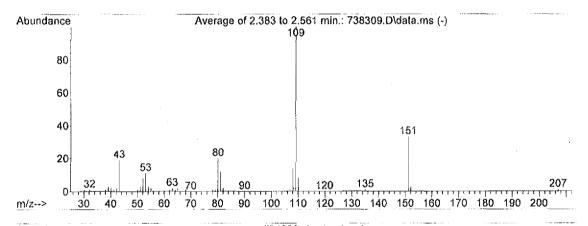
Search Libraries: C:\Database\SLI.L

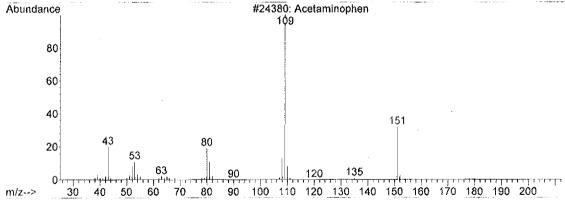
Minimum Quality: 80

C:\Database\NIST08.L

Minimum Quality: 80

PK#	RT	Library/ID	CAS#	Qual
1	2.41	C:\Database\NIST08.L Acetaminophen Acetaminophen Acetaminophen	000103-90-2 000103-90-2 000103-90-2	97 95 91





File Name : C:\msdchem\1\data\SYSTEM6\08 19 10\738309.D

Operator : ASD

Date Acquired 19 Aug 2010 11:40

Sample Name

Submitted by ASD Vial Number 9 AcquisitionMeth: DRUGS.M Integrator : RTE

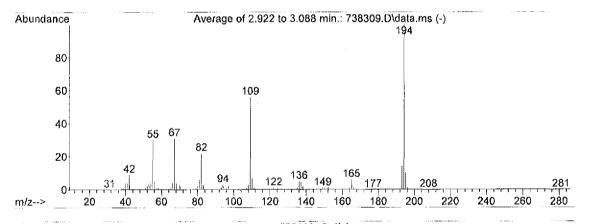
Search Libraries: C:\Database\SLI.L Minimum Quality: 80

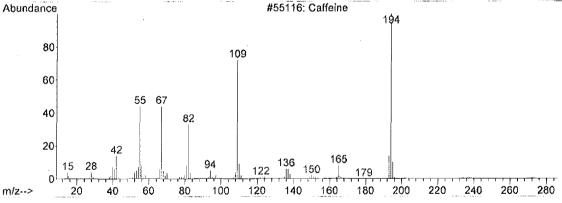
C:\Database\NIST08.L

Minimum Quality: 80

C:\Database\PMW TOX2.L

PK#	RT	Library/ID	CAS#	Qual
2	2.97	C:\Database\NIST08.L		
		Caffeine	000058-08-2	97
		Caffeine	000058-08-2	97
		Caffeine	000058-08-2	96





738309.D

: C:\msdchem\1\data\SYSTEM6\08 19 10\738309.D File Name

Operator : ASD

Date Acquired 19 Aug 2010 11:40

Sample Name

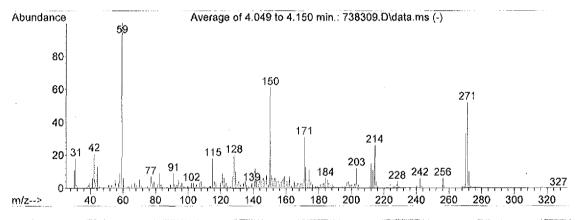
Submitted by ASD Vial Number AcquisitionMeth: DRUGS.M Integrator RTE

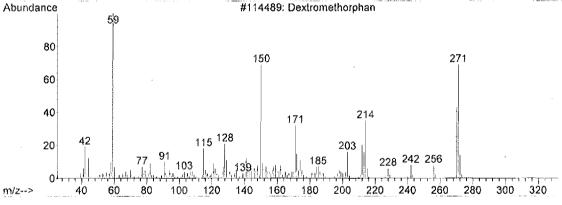
Search Libraries: C:\Database\SLI.L

Minimum Quality: 80 Minimum Quality: 80

C:\Database\NIST08.L

PK#	RT	Library/ID	CAS#	Qual
3	4.07	C:\Database\NIST08.L Dextromethorphan Dextromethorphan Dextromethorphan	000125-71-3 000125-71-3 000125-71-3	99 98 98





```
Information from Data File:
```

File Name : C:\msdchem\1\data\SYSTEM6\08 19 10\738309.D

Operator : ASD

Date Acquired : 19 Aug 2010 11:40

Sample Name

Submitted by : ASD
Vial Number : 9
AcquisitionMeth: DRUGS.M
Integrator : RTE

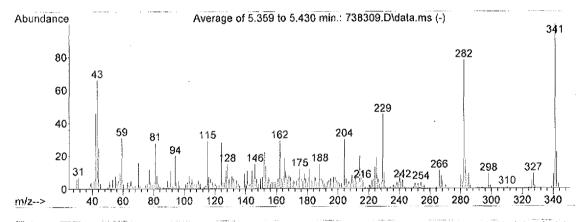
Search Libraries: C:\Database\SLI.L

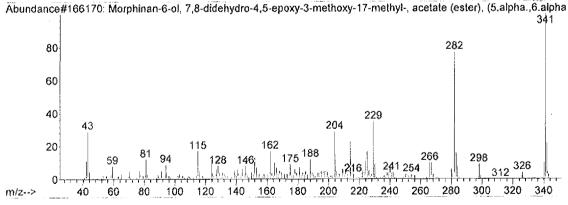
Minimum Quality: 80

C:\Database\NIST08.L

Minimum Quality: 80

PK#	RT	Library/ID CAS#	Qual
4	5.40	C:\Database\NIST08.L Morphinan-6-ol, 7,8-didehydro-4,5-e 006703-27-1 Morphinan-6-ol, 7,8-didehydro-4,5-e 006703-27-1 Morphinan-6-ol, 7,8-didehydro-4,5-e 006703-27-1	99 99 99





: C:/msqchem/1/data/SYSTEM6/08\_19\_10/738309.D

Operator

File Name

dsA

Information from Data File:

```
80 100 120 140 160 180 200 220 240 260 280 300 320 340
                                                                           <--Z/W
                                                               09
                                              601
                      228240252
         298 312
                                       146 162 174
                                                        16 18
                                                                        50
                              215
                                                                        05
                                                                        09
                   892
                                                                        08
      3$7
                         #156512: 6-Monoacetylmorphine
                                                                        Abundance
   80 100 120 140 160 180 200 220 240 260 280 300 320 340
                                                                09
                                                                           <--Z/W
        218 312
341 322
                      228240252
                                                                      15
               284
                                  46L
                                       162174
                                                                        50
                                                        Þ6 †8
                                                   911
                              512
                                                                        04
                                                                   43
                                                                        09
                                                                        08
      357
                  (-) em.stsb/G.e088c7 :,nim +88d.d of 064.d to agestavA
                                                                        Abundance
                                      6-Monoacetylmorphine
      8-87-487200
 Ð6
                                      e-Monoacetylmorphine
 96
      8-67-287200
                                      6-Monoacetylmorphine
 96
      8-87-287200
                                       C:/Database/MIST08.L
                                                                 57.5
                                                                           S
                                                 Library/ID
Qual
            CY2#
                                                                          bK#
                                                                    TA
                                C:/Database/PMW_TOX2.L
Minimum Quality: 80
                                  C:/Database/NIST08.L
                                                           Search Libraries:
Minimum Quality: 80
                                      C:/Database/SLI.L
                                                                    Integraçor
                                                        HLE:
                                                   AcquisitionMeth: DRUGS.M.
                                                                  Vial Number
                                                        6
                                                        USA
                                                                 Submitted by
                                                                  Sample Name
                                                                Date Acquired
                                       01:TT
                                              010S puA e1
```

: C:\msdchem\1\data\SYSTEM6\08 19 10\738309.D File Name

Operator : ASD

Date Acquired : 19 Aug 2010 11:40

Sample Name

Submitted by ASD Vial Number AcquisitionMeth: DRUGS.M : RTE Integrator

C:\Database\SLI.L Search Libraries:

Minimum Quality: 80 Minimum Quality: 80

C:\Database\NIST08.L

C:\Database\PMW TOX2.L

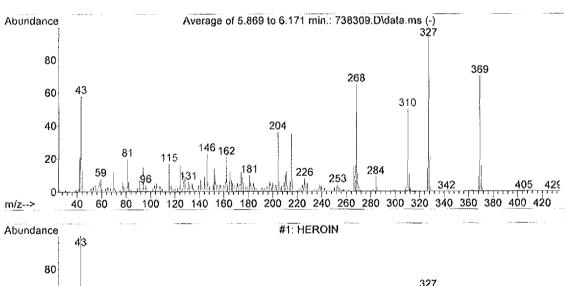
CAS# Qual PK# RTLibrary/ID

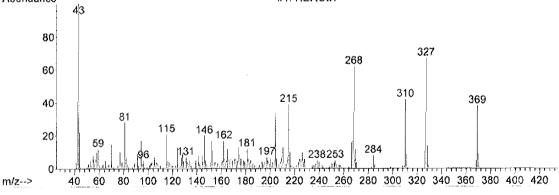
6 5.94 C:\Database\SLI.L

HEROIN

000561-27-3

99



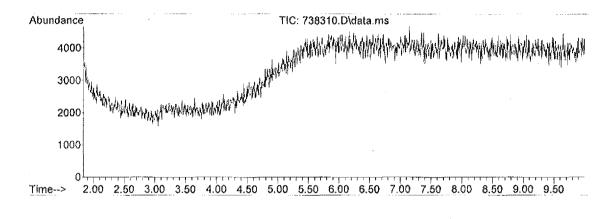


File Name : C:\msdchem\1\data\SYSTEM6\08 19 10\738310.D

Operator : ASD

Date Acquired : 19 Aug 2010 11:53

Sample Name : BLANK
Submitted by : ASD
Vial Number : 1
AcquisitionMeth: DRUGS.M
Integrator : RTE



Ret. Time Area Area % Ratio %

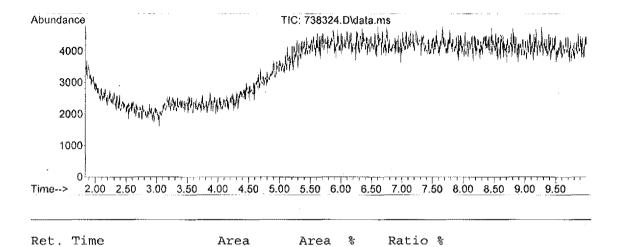
\*\*\*NO INTEGRATED PEAKS\*\*\*

File Name : C:\msdchem\1\data\SYSTEM6\08 19 10\738324.D

Operator : ASD

Date Acquired : 19 Aug 2010 14:53

Sample Name : BLANK
Submitted by : ASD
Vial Number : 1
AcquisitionMeth: DRUGS.M
Integrator : RTE



\*\*\*NO INTEGRATED PEAKS\*\*\*

File Name : C:\msdchem\1\data\SYSTEM6\08\_19\_10\738325.D

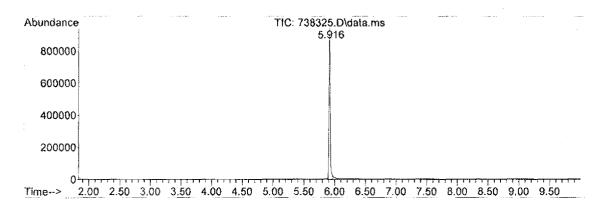
Operator : ASD

ASD

Date Acquired : 19 Aug 2010 15:06

Sample Name : HEROIN STD PREP 08/19/2010

Submitted by : ASD Vial Number : 25 AcquisitionMeth: DRUGS.M Integrator : RTE



Ret. Time	Area	Area %	Ratio %
5.916	1303678	100.00	100.00

File Name : C:\msdchem\1\data\SYSTEM6\08 19 10\738325.D

Operator : ASD

Date Acquired : 19 Aug 2010 15:06

Sample Name : HEROIN STD PREP 08/19/2010

Submitted by : ASD Vial Number : 25 AcquisitionMeth: DRUGS.M Integrator : RTE

Search Libraries: C:\Database\SLI.L

Minimum Quality: 80

C:\Database\NIST08.L

Minimum Quality: 80

C:\Database\PMW TOX2.L

PK# RT Library/ID CAS# Qual

1 5.92 C:\Database\SLI.L

HEROIN

000561-27-3 99

